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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/671,884 | 09/29/2003 | Kelly Shoemake | 005242.00133 | 5371 |

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| EXAMINER |
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MATZEK, MATTHEW D

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| ART UNIT | PAPER NUMBER |
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1771

DATE MAILED: 08/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/671,884

Applicant(s)

SHOEMAKE ET AL.

Examiner

Matthew D. Matzek

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 1-6, 14-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/5/04, 12/23/04.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☒ Other: IDS: 2/4/05.

Response to Amendment

1. Applicant's amendments and accompanying remarks filed (7/12/2005) have been entered and carefully considered. Claims 1-6 and 14-20 have been withdrawn from consideration. No new matter has been added. Applicant's amendment is not found to patentably distinguish the claims over the prior art.
2. Rejection of claims 7-9 under U.S.C. 102 (e) over Belmares et al. (US 2003/0099850), claims 10-12 under U.S.C. 103 (a) over Belmares et al. (US 2003/0099850) in view of Trocino (WO 01/59026), claim 13 under U.S.C. 103 (a) over Belmares et al. (US 2003/0099850) in view of Trocino (WO 01/59026) further in view of Chang et al. (WO 98/34885), claim 7 under U.S.C. 102 (b) over Tinkelenberg (EP 0013447), claims 7-9 under U.S.C. 102 (b) over Tank et al. (EP 1176174) are withdrawn. New grounds of rejection follow as necessitated by the amendment of claims.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 7-9 and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Belmares et al. (US 2004/0048531) in view of Chan et al. (US 6,384,116).
 - a. Belmares et al. disclose a low formaldehyde emission coating from formaldehyde-based resins applied to various substrates (Abstract). The applied publication teaches that the disclosed coating comprises a formaldehyde resin and a polyamide scavenger. The formaldehyde resin may be urea-formaldehyde and the polyamide scavenger may be soy protein [0011]. The effective range of the polyamide

scavenger is from about 5 to about 50% [0023]. The substrate of the applied invention may comprise mineral wool and the applied article serves as an acoustical panel (i.e. insulation) [0001,0002]. The Examiner takes the position that mineral wool is equivalent to fiberglass (www.dictionary.com). The applied publication is silent as to the manner in which the fibrous substrate may be constructed and the incorporation of water-soluble styrene-maleic anhydride into the binder composition.

b. Chan et al. teach the use of a binder composition comprising urea-formaldehyde modified with a water-soluble non-ionic amine oxide and optionally further modified with an anionic acrylic latex (Abstract). The applied invention is to be used for glass fiber mats and results in improved tensile strength of said mats (Abstract). The glass mats are to be used as a roofing product (col. 1, lines 31-36). Glass fiber mats are generally made by a wet-laid nonwoven process similar to that of the papermaking (col. 1, lines 32-40).

c. Since Belmares et al. and Chan et al. are from the same field of endeavor, (i.e. glass fiber mats bound by formaldehyde-based resins) the purpose disclosed by Chan et al. would have been recognized in the art of Belmares et al.

d. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the article of Belmares et al. and provide it with a binder composition comprising urea-formaldehyde modified with a water-soluble non-ionic amine oxide and optionally further modified with an anionic acrylic latex with the motivation of improving the acoustic insulation panel with improved tensile strength as disclosed by Chan et al. (Abstract).

Art Unit: 1771

4. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Belmares et al. (US 2004/0048531 in view of Chan et al. (US 6,384,116) as applied to claims 7-9 above, and further in view of Trocino (WO 01/59026). Belmares et al. is silent as to the type of soy protein to be used in the applied invention.

a. Trocino discloses a vegetable protein-based adhesive composition comprising soy protein made from soy meal (soy flour) (Abstract). Example 1 teaches a binder formulation comprising soymeal and urea-formaldehyde.

b. Since Belmares et al. and Trocino are from the same field of endeavor (i.e. soy protein binders for use in the construction of fiberboard panels) the purpose disclosed by Trocino would have been recognized in the pertinent art of Belmares et al.

c. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the adhesive composition of Belmares et al. with the soy flour of Trocino motivated by the fact that soy meal is low in cost and is readily available.

Response to Arguments

5. Applicant's arguments filed 7/12/2005 have been fully considered but they are not persuasive.

6. Applicant argues that Belmares et al. (US 2003/0099850) does not teach or make it obvious to use the instantly claimed level of protein in the binder because an illustrative example of the invention uses 25 weight percent protein. As cited by Applicant, Belmares et al. teaches that the level of the formaldehyde scavenger (protein) may be from 5-50 percent. Examples are

Art Unit: 1771

merely select illustrations of the invention and should not serve to unnecessarily limit the scope of the invention.

7. In response to Applicant's argument that Belmares et al. (US 2003/0099850) and Trocino (WO 01/59026) are nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, as the two inventions are directed to soy protein binders for use in the construction of fiberboard panels.

8. In response to Applicant's argument that Belmares et al. (US 2003/0099850), Trocino (WO 01/59026), and Chang (WO 98/34885) are nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, as the three inventions are directed for use in the construction of fiberboard panels.

9. Applicant argues that Tinkelenberg (EP 0013447) does not read does not read on the previously active claim 7. The applied invention possesses all the previously active limitations, but is no longer applicable with the instant limitation of a nonwoven, wet-laid fiber mat.

10. Applicant argues that Tang et al. (EP 1176174) does not read does not read on the previously active claims 7-9. The applied invention possesses all the previously active

limitations, but is no longer applicable with the instant limitation of a nonwoven, wet-laid fiber mat.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew D. Matzek whose telephone number is (571) 272-2423. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1771

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mdm


NORCA TORRES
PRIMARY EXAMINER